

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	263189	(measure or measured or measuring or monitor or monitored or monitoring or sense or sensed or sensing or detect or detected or detecting or detection) near5 (ink or toner or paper or consumable or expendable or supply)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 04:31
2	BRS	L2	5600	1 near5 (cost or costing or price or pricing or rate or rating or fee or quote or quoting or rfq)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 04:32
3	BRS	L3	261	2 near5 (return or returned or returning or recycle or recycled or recycling or volume or quantity) <i>Scanned Ti, Ab, Kwic all</i>	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 04:32
4	BRS	L4	310	("4811234" or "4961507").pn. or ((@pd<="19710101" not @pd<="19470101") and (705/400 or "705"/)).ccls.) <i>Scanned Ti all</i>	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 04:52

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	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	WO 9218335 A	19921029	HANAOKA, I et al.			18
2	JP 02084677 A	19900326	AIZAWA, HIDEO		399/49	5
3	US 6089688 A	20000718	Froger; Marie-Helene et al.	347/7	399/27; 73/304C	17

L3 results

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	US 4961507 A	19901009	Higgins; Larry G.	221/129	194/904; 235/381; 700/236; 700/237	19
2	US 4811234 A	19890307	Storage; Anthony	705/403	379/102.01; 379/106.03	13

L4 results

PAT-NO: JP402084677A
DOCUMENT-IDENTIFIER: JP 02084677 A
TITLE: TONER CONCENTRATION CONTROLLER FOR COPYING
MACHINE
PUBN-DATE: March 26, 1990
INVENTOR-INFORMATION:
NAME
AIZAWA, HIDEO
INT-CL (IPC): G03G015/08
US-CL-CURRENT: 399/49

ABSTRACT:

PURPOSE: To always obtain stable image quality by controlling the replenishing quantity of toner which is replenished to a developing device according to the adhering quantity of toner which is detected by a toner detection means.

CONSTITUTION: At the time of exchanging developer, the adhering quantity of the toner of an untransferred pattern image which adheres to the surface of a photosensitive body 1 is detected by the toner detection means 16 and a detection level is measured by a toner replenishing quantity control means 20 based on the detected adhering quantity of the toner. According to the detection level, toner replenishment rate is selected so that the replenishing quantity of the toner which is replenished to the developing device 6 may be an optimum value. Thus, the density of an image formed on a transfer paper can be kept uniform and the stable image quality can be always obtained.

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DERWENT-ACC-NO: 1992-381914

DERWENT-WEEK: 199246

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TITLE: Ink residual quantity sensor of ink jet printer - operates by comparing number of dots printed with number of dots that could be printed by quantity of ink contained in ink cartridge

INVENTOR: HANAOKA, I; UOZUMI, S ; YAMADA, M

PRIORITY-DATA: 1991JP-0085295 (April 17, 1991)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9218335 A1	October 29, 1992	E	013	B41J 002/175
EP 538444 A1	April 28, 1993	E	000	B41J 002/175
INT-CL (IPC):	B41J002/175			

ABSTRACTED-PUB-NO: WO 9218335A

BASIC-ABSTRACT:

The ink residual quantity sensor consists of a control unit (21) and a memory unit (26) having a number of printable dots storage device (27) which stores a number computed from the full volume capacity of the ink cartridge. A second storage device (28) stores a number representing the total number of dots actually printed by the printhead.

The control unit causes the second storage device to be incremented by the appropriate number of dots each time the priming device is actioned. It also contains an ink residue detector which computes the residual quantity of ink based on the difference between the numbers of printable and actual printed dots. This quantity is displayed on display output (32).

ADVANTAGE - Accurate detection of residual quantity of ink in ink cartridge without increasing cost of ink cartridge.

US-PAT-NO: 6089688

DOCUMENT-IDENTIFIER: US 6089688 A

TITLE: Method and device for monitoring the consumption of a product, such as an ink, contained in a reservoir

DATE-ISSUED: July 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	COUNTRY
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Froger; Marie-Helene Chateagiron		FR
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Coudray; Pascal	La Chapelle des Fougeretz	FR
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US-CL-CURRENT: 347/7, 399/27 , 73/304C

ABSTRACT: In order to monitor the consumption of a normally electrically conductive product contained in a reservoir made of electrically insulating material, a measurement procedure is defined according to which there is taken off a measurement signal in response to an excitation signal applied to a storage cavity in this reservoir, this signal being such that a characteristic, such as the voltage, of the measurement signal varies substantially with the quantity of product contained in the cavity, and with a utilisation parameter of this product. A procedure for determining this utilisation parameter and a processing procedure giving an item of information on the quantity of product remaining in the reservoir as a function not only of the said characteristic but also of the instantaneous value of the utilisation parameter, are also defined. In the field of printing, this parameter can be the density of printing of the printed pages, or the temperature.

38 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

----- KWIC -----

Brief Summary Text - BSTX (48): Amongst the utilisation parameters which it has seemed useful to monitor, there is the flow rate at which the product leaves the reservoir. Where the reservoir is designed to be integrated into an image formation device, this flow rate can be measured by the quantity of product which flows during the formation of an image; and, in the case of a printing device, this flow rate can be measured by the quantity of ink consumed during the printing of a page.